*A*udit

*R*eport

552ND AIR CONTROL WING YEAR 2000
INFRASTRUCTURE PROGRAM FOR THE
AIRBORNE WARNING AND CONTROL SYSTEM

Report No. 99-039   November 23, 1998

Office of the Inspector General
Department of Defense

Acronyms

ACC	Air Combat Command
AWACS	Airborne Warning and Control System
PMP	Program Management Plan
Y2K	Year 2000

INSPECTOR GENERAL
DEPARTMENT OF DEFENSE
400 ARMY NAVY DRIVE
ARLINGTON, VIRGINIA 22202

November 23, 1998

MEMORANDUM FOR ASSISTANT SECRETARY OF THE AIR FORCE
(FINANCIAL MANAGEMENT AND COMPTROLLER)

SUBJECT: Audit Report on the 552nd Air Control Wing Year 2000 Infrastructure
Program for the Airborne Warning and Control System
(Report No. 99-039)

We are providing this audit report for information and use. This is the second
of three reports on the year 2000 conversion efforts of the Airborne Warning and
Control System. We considered management comments in preparing the final report.

Management comments conformed to the requirements of DoD
Directive 7650.3 and left no unresolved issues. Therefore, no additional comments are
required.

We appreciate the courtesies extended to the audit staff. Questions on this
audit should be directed to Mr. Robert K. West at (703) 604-8983 (DSN 664-8983),
e-mail <rwest@dodig.osd.mil>; or Mr. Robert Otten at (703) 604-8997
(DSN 664-8997), e-mail <rotten@dodig.osd.mil>. See Appendix C for the report
distribution. The team members are listed on the inside back cover of the report.

Robert J. Lieberman
Assistant Inspector General
for Auditing

Office of the Inspector General, DoD

Report No. 99-039
Project No. 8AS-0032.11

November 23, 1998

552nd Air Control Wing Year 2000 Infrastructure Program for the Airborne Warning and Control System

Executive Summary

Introduction. This is one in a series of reports being issued by the Inspector General, DoD, in accordance with an informal partnership with the Chief Information Officer, DoD, to monitor DoD efforts to address the year 2000 computing challenge. For a listing of audit projects addressing the issue, see the year 2000 webpage on the IGnet at http://www.ignet.gov.

The year 2000 problem is the term most often used to describe the potential failure of information technology systems to process or perform date-related functions before, on, or after the turn of the next century.

The E-3 Airborne Warning and Control System provides all-weather surveillance and command, control, and communication functions to commanders of U.S. tactical and air defense forces. Thirty-two U.S. Airborne Warning and Control Systems are located throughout the world.

Audit Objectives. The overall audit objective was to determine whether the 552nd Air Control Wing effectively planned, executed, and coordinated year 2000 infrastructure efforts for the Airborne Warning and Control System. Specifically, we reviewed the 552nd Air Control Wing year 2000 infrastructure program management plan; contingency and test plans; funding for replacing, renovating, and repairing year 2000 noncompliant systems; and the system certification processes.

Audit Results. The 552nd Air Control Wing did not prepare a program management plan that encompasses guidance from DoD, the Air Force, and Air Combat Command. Furthermore, the 552nd Air Control Wing did not perform a complete inventory of its mission-critical and mission-essential infrastructure items. As a result, the 552nd Air Control Wing was not able to prioritize its resources to fix year 2000 problems and could not yet provide assurance that Airborne Warning and Control System mission-critical and mission-essential systems would be operational in the year 2000 and beyond. Without that assurance, the operational availability of the Airborne Warning and Control System could be affected. See Part I for a discussion of the audit results.

We are addressing the year 2000 conversion actions taken by the Airborne Warning and Control System program office and Airborne Warning and Control System supply and maintenance infrastructure issues related to the Air Logistics Center Oklahoma City and Air Logistics Center San Antonio in separate reports.

Summary of Recommendations. We recommend that the Commander, 552nd Air Control Wing, appoint a year 2000 management team that includes senior management officials from the operations, logistics, and computer systems functional groups. The management team should provide oversight and direction in the execution of the year 2000 program. The management team should require the year 2000 working group to revise the program management plan so that it effectively addresses contingency and test plans, certification procedures, and reporting requirements. Additionally, we recommend that the year 2000 management team identify mission-critical and mission-essential infrastructure systems and prioritize those systems for fixes, renovation, or replacement.

Management Comments. The Commander, 552nd Air Control Wing, concurred with the recommendations and stated that he has required monthly year 2000 status briefings to be presented at Wing staff meetings. He assigned two staff members to assist the Wing's year 2000 team in creating, collecting, and disseminating year 2000 documentation and information and in reviewing contingency plans, inventory lists, and test certifications. The Commander directed the year 2000 team to revise the Program Management Plan to address the preparation of contingency and test plans and other year 2000 documentation. In addition, the Commander stated that the year 2000 team reassessed the Wing infrastructure and added any overlooked items to the year 2000 inventory. See Part I for the complete discussion of management comments and Part III for the complete text of management comments.

Table of Contents

Part I - Audit Results

Audit Background

Because of the potential failure of computers to run or function throughout the Government, the President issued an Executive Order, "Year 2000 Conversion," February 4, 1998, making it policy that Federal agencies ensure that no critical Federal program experiences disruption because of the year 2000 problem and that the head of each agency ensure that efforts to address the year 2000 problem receive the highest priority attention in the agency.

Airborne Warning and Control System. The E-3 Airborne Warning and Control System (AWACS) provides airborne all-weather surveillance and command and control functions to commanders of U.S. tactical and air defense forces. The basic E-3 air vehicle is a militarized version of the Boeing 707 commercial jetliner air vehicle, which has been in service since 1977. Thirty-two U.S. AWACS are located throughout the world. In addition, the North Atlantic Treaty Organization and several foreign countries own and operate AWACS to support their missions. The U.S. AWACS uses surveillance radar, identification friend or foe interrogator, datalink systems, voice communications, and electronic support measures to complete its missions.

552nd Air Control Wing. The 552nd Air Control Wing (the Wing) operates and supports AWACS theater battle management forces worldwide for all peacetime and contingency operations. The Wing is composed of three functional groups, which are the Computer Systems, Logistics, and Operations Groups. The Wing is unique in that it has its own internal software development group. The Computer Systems Group creates, delivers, and sustains communications and computer support for the AWACS and provides ground communications support for the Wing. The Wing uses 18 internally developed software systems. The Computer Systems Group maintains all computer codes and performs all necessary upgrades and fixes for the software systems. The Logistics Support Group directs all information management, logistical plans, supply, security, and mobility operations for the Wing. The Operations Group provides ground and airborne systems and personnel for surveillance, warning and control of strategic, tactical, and special-mission forces. The Operations Group also provides training for crews and maintenance, computer, and logistics support for the AWACS aircraft.

The Wing Y2K Tiger Team. The Wing Y2K Tiger Team serves as the focal point for addressing potential computer information technology failures associated with Y2K. The Tiger Team consists of functional area representatives from each primary functional group and is chaired by the Y2K point of contact, who is a representative of the Computer Systems Group. Tiger Team responsibilities include developing the Wing Y2K program management plan (PMP), coordinating all Y2K actions with Air Combat Command (ACC) and the Air Force Communications Agency, advising Wing leadership on all key Y2K initiatives, and requesting resources needed to carry out those initiatives.

Y2K Date-Processing Problem. The Y2K problem is the term most often used to describe the potential failure of information technology systems to process or perform date-related functions before, on, or after the turn of the next century. The Y2K problem is rooted in the way that dates are recorded and computed in automated information systems. For the past several decades, systems have typically used two digits to represent the year, such as "98" representing 1998, to conserve electronic data storage and reduce operating costs. With the two-digit format, however, the year 2000 is indistinguishable from 1900. As a result of this ambiguity, system and application programs that use dates to perform calculations, comparisons, or sorting could generate incorrect results when working with years following 1999. Calculating dates is further complicated because the year 2000 is a leap year. The computer systems and applications must recognize February 29, 2000, as a valid date.

ACC Y2K PMP, Version 1.0, January 5, 1998. The PMP provides the management approach for implementing Y2K initiatives and goals within the command. The PMP encompasses DoD and Air Force policy, roles and responsibilities, information flow, the Air Force five-phase approach, compliance and certification strategies, reporting requirements, program assessment, and risk management.

ACC Y2K Infrastructure Guidance Package, Version 1.1, April 8, 1998. ACC subordinate commands use this guidance to manage the infrastructure portion of the Y2K challenge. It encompasses the Air Force policy, the Air Force three-phased approach for managing Y2K conversion of infrastructure systems, roles and responsibilities, reporting requirements, information flow, and compliance and certification strategies. See Appendix B for a discussion of DoD and Air Force guidance.

Recent Secretary of Defense Guidance. The Secretary of Defense issued the memorandum "Year 2000 Compliance," on August 7, 1998, and stated that DoD is making insufficient progress in its efforts to solve its Y2K computer problem and stated that the Y2K problem is a critical national Defense issue. He also required that the Services and Defense Agencies report the status of major weapon system programs by October 1, 1998.

The Deputy Secretary of Defense issued the memorandum, "Year 2000 (Y2K) Verification of National Security Capabilities," on August 24, 1998. The memorandum states that the Head of each Service and Directors of Defense Agencies must certify that they have tested the information technology and national security system Y2K capabilities of their respective Component's systems in accordance with the DoD Y2K Management Plan.

Audit Objectives

The overall audit objective was to determine whether the Wing effectively planned, executed, and coordinated Y2K efforts for AWACS. Specifically, we reviewed the Wing's Y2K infrastructure PMP; contingency and test plans; funding for replacing, renovating, and repairing Y2K noncompliant systems; and the system certification processes. Refer to Appendix A for a discussion of the audit scope and methodology.

552nd Air Control Wing Year 2000 Program Management

The Wing did not prepare a complete Y2K PMP that fully addresses contingency and test plans, system certification procedures, reporting requirements, and inventory procedures. The Wing also had not identified all mission-critical and mission-essential infrastructure systems. The conditions occurred because the Wing did not take a proactive role in the oversight of Y2K conversion and the implementation of Air Force Y2K guidance. As a result, the Wing was not able to prioritize its resources for fixing Y2K problems and could not provide assurance that AWACS mission-critical and mission-essential infrastructure systems will be operational in the year 2000 and beyond. Without that assurance, the operational availability of AWACS could be affected.

Wing Y2K Program Efforts

The Wing PMP. Air Force Y2K guidance requires organizations to prepare a PMP using the five-phase management process. Accordingly, the PMP should address contingency plans, test plans, certification procedures, inventory methodology, and funding and reporting requirements. However, the Wing PMP focuses only on identifying and resolving infrastructure Y2K problems without addressing the Air Force five-phase process or providing adequate direction on how to implement Air Force Y2K guidance.

  Contingency Plans. Air Force Y2K guidance requires the contingency plans to be prepared for internally developed software systems. Air Force guidance also requires contingency plans to be updated and tested as process and resource changes occur. The Wing PMP does not provide guidance for developing contingency plans and does not assign the responsibility for developing plans. The Wing PMP also does not provide milestones for updating and testing the contingency plans. The Wing PMP merely states that contingency plans will be prepared for all systems in the event of a Y2K failure.

  Test Plans. Air Force guidance requires that test plans for each information technology system be developed or that existing plans be modified to include Y2K testing procedures. The test plans must also include how test results will be recorded. The PMP did not address Wing-level guidance for Y2K compliance testing. For example, the PMP plans did not address test objectives, test approach, required equipment and resources, necessary personnel, test procedures, or expected test results. Additionally, the Wing does not have a method for recording and tracking Y2K test results.

  System Certification Procedures. Air Force guidance requires Y2K system certification to address and assess the ability of each information technology system to process data in the year 2000 and beyond. The certification process begins during the awareness phase, spans through the entire

five-phase management process, and is completed in the implementation phase. The Air Force guidance requires the Wing to prepare a certification tracking document with a compliance checklist for each system. The Wing PMP does not address certification procedures for its systems, and it does not require the use of certification tracking documents or checklists to ensure that systems are properly certified.

Reporting Requirements. Air Force guidance requires automated and management information systems to be reported and entered into the Air Force inventory database. Although the Wing has accurately reported its internally developed software in the Air Force inventory database, the PMP does not specifically address that reporting requirement. The Wing also is required to report mission-critical and mission-essential infrastructure items to the ACC program management office; however, the Wing infrastructure inventory report, submitted to ACC in February 1998, did not include all mission-critical and mission-essential infrastructure items.

Inventory Methodology. Air Force guidance requires a completed and detailed system inventory. The Air Force uses inventory reporting to assess the magnitude of the Y2K problem throughout the Air Force and to assist managers in developing cost and manpower estimates for correcting Y2K problems.

Wing Internally Developed Software Inventory. The Wing performed an inventory of all internally developed software systems and reported the results in the Air Force inventory database.

Wing Infrastructure Inventory. The Wing did not identify all mission-critical and mission-essential infrastructure items. The Wing infrastructure inventory, submitted to ACC in February 1998, did not include mission and flight simulators, commercial-off-the-shelf software, and personal computers.

Y2K Funding Requirements. Air Force guidance requires the prioritization of resources to manage and resolve Y2K issues. Because the Wing did not perform a complete inventory of its infrastructure items, it could not determine the funds necessary to renovate, repair, or replace Y2K noncompliant systems and could not prioritize noncompliant systems.

Wing Y2K Oversight

The Wing leadership needed to be more proactive in issuing direction or guidance on the importance of participating in the Y2K conversion effort and did not disseminate guidance throughout the three functional groups for a coordinated Y2K effort. Instead, the Y2K point of contact issued guidance and direction through the Wing Y2K Tiger Team representatives. Because senior management did not actively participate in Y2K actions, the Y2K point of

contact direction and guidance was not always followed. For example, Tiger Team members did not always perform requested information technology inventories or attend scheduled Y2K meetings.

Wing Y2K Actions

Y2K Walk-Through. The ACC issued guidance for its subordinate commands to set aside a day in July 1998 to perform a walk-through to identify mission areas and processes as well as supporting infrastructure systems that are affected by Y2K. The Y2K walk-through would be used to perform a 100 percent inventory of all infrastructure, weapon, command and control, and automated information systems. The Wing performed its Y2K walk-through in July. However, it was completed after our audit, and we did not verify the walk-through results.

Conclusion

The Wing did not have a complete PMP that fully addressed Air Force guidance on Y2K conversion efforts. Also, the Wing guidance was not disseminated throughout the three functional groups for a coordinated Y2K effort. Although the Wing took efforts to ensure that its internally developed software items were inventoried and were Y2K compliant, the Wing did not identify all mission-critical and mission-essential infrastructure items in its inventory and could not provide assurance that those items will be operational in the year 2000 and beyond. Without the assurance that mission-critical and mission-essential infrastructure items will be operational in the year 2000 and beyond, the operational availability of AWACS could be affected. The July 1998 walk-through and the comments received on the draft audit report indicate that the Wing senior management have acknowledged the need for active management of the Y2K conversion

Recommendations, Management Comments, and Audit Response

1. **We recommend the Commander, 552nd Air Control Wing, appoint a year 2000 management team that includes senior management officials from each of the three functional groups. The primary responsibility of the team should be to provide oversight and direction for the year 2000 program.**

Air Force Comments. The Commander, 552nd Air Control Wing, concurred with the intent of the recommendation and stated that the Wing incorporated a monthly Y2K status brief into the Wing staff meetings and appointed two staff members to expand the Wing Y2K hierarchy structure. The new hierarchy structure will ensure senior management level awareness, involvement, and accountability at both squadron and group levels on the preparation of Y2K contingency plans, completion of inventory lists, and review of test certification results.

Audit Response. Management comments met the intent of the recommendation. The Wing's actions to assign senior managers to the Y2K hierarchy structure and to have them directly involved in the Y2K effort should improve oversight and direction in implementing DoD and Air Force Y2K guidance.

2. **We recommend the 552nd Air Control Wing year 2000 management team require the year 2000 Tiger Team to revise the program management plan to address contingency plans, test plans, reporting requirements, certification procedures, and certification tracking documents.**

Air Force Comments. The Commander, 552nd Air Control Wing, concurred and stated that the Wing issued a revised Program Management Plan that provides further guidance in preparing contingency and test plans and in addressing Y2K reporting and certification requirements. The Wing will follow the Y2K schedule specified in the revised Program Management Plan and brief the Y2K status at monthly Wing staff meetings.

Audit Response. Management comments were responsive. The Wing's action to revise the Program Management Plan to address contingency and test plans and reporting and certification requirements should significantly improve the Wing's ability to identify and correct potential Y2K risks.

3. **We recommend that the year 2000 management team identify all mission-critical and mission-essential infrastructure systems and prioritize the systems for fixes, renovation, or replacement.**

Air Force Comments. The Commander, 552nd Air Control Wing, concurred and stated that the Wing performed an inventory of all Wing sections and used the results to update the Y2K inventory records and to prioritize the renovation and replacement of items not previously on the Y2K inventory list. The Wing completed the inventory assessment on October 27, 1998.

Audit Response. Management comments were responsive. The Wing's action to inventory its infrastructure systems will enable management to identify infrastructure systems that were not previously reported. The revised infrastructure inventory listing can be used to determine the funds necessary to renovate or replace any infrastructure that is not Y2K compliant.

This Page Intentionally
Left Blank

Part II - Additional Information

Appendix A. Audit Process

This is one of a series of reports being issued by the Inspector General, DoD, in accordance with an informal partnership with the Chief Information Officer, DoD, to monitor DoD efforts to address the Y2K conversion challenge. For a listing of audit projects addressing this issue, see the Y2K webpage on IGnet at (http://www.ignet.gov).

Scope

Work Performed. We reviewed the Wing Year 2000 PMP and the management approach for implementing Y2K program initiatives and goals. We evaluated the adequacy and completeness of the PMP to assure that it addressed contingency and test plans; funding for replacing, renovating and repairing year 2000 noncompliant systems; and the certification processes. We evaluated the reliability and completeness of the hardware and software inventory submitted to ACC. We interviewed personnel responsible for planning Y2K actions, issuing Y2K guidance, and identifying and reporting Y2K date-cognizant systems. We based our review on DoD, Air Force, and ACC Y2K guidance.

DoD-Wide Corporate Level Government Performance and Results Act Goals. In response to the Government Performance and Results Act, the Department of Defense has established 6 DoD-wide corporate-level performance objectives and 14 goals for meeting the objectives. This report pertains to achievement of the following objective and goal.

- **Objective:** Prepare now for an uncertain future.

- **Goal:** Pursue a focused modernization effort that maintains U.S. qualitative superiority in key war fighting capabilities. **(DoD-3)**

DoD Functional Area Reform Goals. Most major DoD functional areas have also established performance improvement reform objectives and goals. This report pertains to achievement of the following functional area objectives and goals.

- **Information Technology Management Functional Area.**
  Objective: Become a mission partner.
  Goal: Serve mission information users as customers. **(ITM-1.2)**

- **Information Technology Management Functional Area.**
  Objective: Provide services that satisfy customer information needs.
  Goal: Modernize and integrate Defense information infrastructure. **(ITM-2.2)**

12

- **Information Technology Management Functional Area.**
  Objective: Provide services that satisfy customer information needs.
  Goal: Upgrade technology base. **(ITM-2.3)**

General Accounting Office High-Risk Area. In its identification of risk areas, the General Accounting Office has specifically designated risk in the resolution of the Y2K conversion problem as high. This report provides coverage of that problem and of the overall Information Management and Technology high-risk area.

Methodology

Use of Computer-Processed Data. We did not rely on computer-processed data for this audit. However, we reviewed Y2K documents dated from October 1997 to July 1998, and evaluated the Wing policies and procedures for planning, executing, and coordinating the Y2K infrastructure effort.

Audit Type, Dates, and Standard. We performed this economy and efficiency audit from April through August 1998, in accordance with auditing standards issued by the Comptroller General of the United States, as implemented by the Inspector General, DoD.

Contacts During the Audit. We visited or contacted individuals and organizations within the Air Force. Further details are available upon request.

Management Control Program. We did not review the management control program related to the overall audit objective because DoD recognized the Y2K issue as a material management control weakness area in its Annual Statements of Assurance for FYs 1996 and 1997.

Summary of Prior Coverage

The General Accounting Office and the Inspector General, DoD, have conducted multiple reviews related to Y2K issues. General Accounting reports can be accessed over the Internet at (http://www.gao.gov). Inspector General, DoD reports can be accessed over the Internet at (http://www.dodig.osd.mil).

Previous reports dealing with AWACS included IG, DoD Report No. 99-017, Year 2000 Conversion of the Airborne Warning and Control system, October 18, 1998. Another IG, DoD, audit report, Logistics and Maintenance Information Systems Used to Support AWACS, is pending.

Appendix B. DoD and Air Force Y2K Guidance

DoD Y2K Management Plan. In his role as the DoD Chief Information Officer, the Assistant Secretary of Defense (Command, Control, Communications, and Intelligence) issued the "DoD Year 2000 Management Plan" (DoD Management Plan) in April 1997. The DoD Management Plan provides the overall DoD strategy and guidance for inventorying, prioritizing, fixing, or retiring systems, and monitoring their progress. The DoD Management Plan states that the DoD Chief Information Officer has the overall responsibility for overseeing the DoD solution to the Y2K conversion problem. Also, the DoD Management Plan makes the DoD Components responsible for implementing the five-phase Y2K management process. The DoD Management Plan includes a description of the five-phase Y2K management process. The DoD Management Plan, for Signature Draft Version 2.0, June 1998, accelerates the target completion dates for the renovation, validation, and implementation phases. The new target completion date for implementation of mission-critical systems is December 31, 1998.

In a January 20, 1998, memorandum for the heads of executive departments and agencies, the Office of Management and Budget established a new target date of March 1999 for implementing all corrective actions to all systems. The new target completion dates are September 1998 for the renovation phase and January 1999 for the validation phase.

The Air Force Five-Phase Resolution Process. The Air Force five-phase resolution process is an established method for handling the Y2K problem. Each phase represents a major Y2K program activity or segment. Completion dates for the phases range from June 1997 through December 1998.

>**Awareness Phase.** The Air Force resolution process dedicated a period of time to promote awareness of the Y2K conversion problem throughout the Air Force. During that time, a project team should have been assigned and a PMP developed to address the Y2K conversion problem. The awareness phase was to be completed by June 30, 1997.

>**Assessment Phase.** The assessment phase was dedicated to inventorying all existing systems; analyzing the systems to ensure Y2K compliance; determining whether the noncompliant system should be kept; merged into another system, or terminated; prioritizing the systems based upon mission criticality; identifying system interfaces and system owners; and developing a contingency plan to ensure continued operations if systems are not compliant by January 1, 2000. The assessment phase was to be completed by October 31, 1997.

>**Renovation Phase.** The renovation phase was dedicated to modifying each system that was not scheduled to be terminated by making it Y2K compliant. The renovation phase was to be completed by June 30, 1998.

Validation Phase. The validation phase was dedicated to testing the systems in a controlled environment to ensure that the modifications correctly addressed Y2K issues and that other errors had not been introduced. The phase was completed when the system was certified as meeting all Y2K conversion requirements and was to be completed by September 30, 1998.

Implementation Phase. The implementation phase is dedicated to installing the systems that have successfully met all testing and certification requirements into production or operational environments. Because testing and production environments may vary, problems may still be encountered in the implementation phase. Therefore, this phase also requires a period of user acceptance testing and monitoring and a fallback and recovery plan. The implementation phase is to be completed by December 31, 1998.

The Air Force Y2K Management Strategy. The Air Force Communications Agency is responsible for coordinating all Air Force Y2K efforts. In April 1997, it issued the "Year 2000 Guidance Package," that established the Air Force five-phase resolution process. The five-phase process is an established method for handling the Y2K problem in automated information systems and weapon systems and mirrors the DoD five-phase management process. In October 1997, the Air Force Communications Agency issued the "Air Force Year 2000 Infrastructure MAJCOM/Wing Commander's Package," which describes an overall plan to minimize Y2K operational impacts and also describes mandated Y2K infrastructure data reporting. In May 1998, the Air Force Chief Information Officer issued the "Air Force Year 2000 Contingency Planning Guide" to ensure Air Force readiness by requiring the development of Y2K contingency plans.

Air Force Y2K Infrastructure Guidance. Infrastructure items are computer-controlled, date-cognizant items on which missions depend. The Air Force infrastructure guidance provides the following three-phase process to manage the Y2K conversion of infrastructure:

Inventory Phase. Inventory of affected items is developed and mission risks are identified. Target completion date: March 31, 1998.

Assessment Phase. Compliance is determined, mission risk is assessed, and corrective actions are determined. Target completion date: November 30, 1998.

Implementation Phase. Contingency actions documented and affected items are fixed, replaced, or ignored. Target completion date: May 31, 1999.

Air Force Contingency Planning Guidance. Air Force contingency planning guidance requires that contingency plans identify potential Y2K-related failures, assess the impact of those failures, identify risk-mitigation strategies, and ensure continuity of operations. The guide requires three types of contingency plans within the following milestones:

Operational. The Air Force user develops and implements operational contingency plans that deal with continuing and completing missions in

15

worst-case scenarios and identifies the hazards, impacts, probabilities, and mitigation procedures for the mission. Operational contingency plans are required by December 31, 1998.

Systems. Base-level managers, in coordination with system developers and end users, prepare system contingency plans to ensure that all potential risks have been identified and addressed. System contingency plans are required by December 31, 1998.

Programmatic. System developers, in coordination with end users, prepare programmatic contingency plans for all automated information systems and weapons systems determined to be mission critical or mission essential. Programmatic contingency plans were required by June 20, 1998.

Appendix C. Report Distribution

Office of the Secretary of Defense

Under Secretary of Defense for Acquisition and Technology
    Deputy Under Secretary of Defense (Logistics)
    Director, Defense Logistics Studies Information Exchange
Under Secretary of Defense (Comptroller)
    Deputy Chief Financial Officer
    Deputy Comptroller (Program/Budget)
Assistant Secretary of Defense (Command, Control, Communications, and
    Intelligence)
    Year 2000 Oversight and Contingency Planning Office
Assistant to the Secretary of Defense (Public Affairs)

Department of the Army

Assistant Secretary of the Army (Financial Management and Comptroller)
Auditor General, Department of the Army
Chief Information Officer, Department of the Army
Inspector General, Department of the Army

Department of the Navy

Assistant Secretary of the Navy (Financial Management and Comptroller)
Auditor General, Department of the Navy
Chief Information Officer, Department of the Navy
Inspector General, Department of the Navy
Inspector General, Marine Corps

Department of the Air Force

Assistant Secretary of the Air Force (Financial Management and Comptroller)
Auditor General, Department of the Air Force
Chief Information Officer, Department of the Air Force
Commander, Air Force Materiel Command
    Commander, Electronic Systems Center
Commander, Air Combat Command
    Commander, 552nd Air Control Wing
Commander, 3rd Air Wing
Inspector General, Department of the Air Force

Other Defense Organizations

Director, Defense Information Systems Agency
   Inspector General, Defense Information Systems Agency
   United Kingdom Liaison Officer, Defense Information Systems Agency
Director, National Security Agency
   Inspector General, National Security Agency

Non-Defense Federal Organizations and Individuals

Office of Management and Budget
   Office of Information and Regulatory Affairs
Technical Information Center, National Security and International Affairs Division,
   General Accounting Office
Director, Defense Information and Financial Management System, Accounting and
   Information Management Division, General Accounting Office

Chairman and ranking minority member of each of the following congressional
committees and subcommittees:

Senate Committee on Appropriations
Senate Subcommittee on Defense, Committee on Appropriations
Senate Committee on Armed Services
Senate Committee on Governmental Affairs
Senate Select Committee on Intelligence
Senate Special Committee on the Year 2000 Technology Problem
House Committee on Appropriations
House Subcommittee on National Security, Committee on Appropriations
House Committee on Government Reform and Oversight
House Subcommittee on Government Management, Information, and Technology,
   Committee on Government Reform and Oversight
House Subcommittee on National Security, International Affairs, and Criminal Justice,
   Committee on Government Reform and Oversight
House Committee on National Security

Part III - Management Comments

19

552nd Air Control Wing Comments

5 OCT 1998

MEMORANDUM FOR INSPECTOR GENERAL DEPARTMENT OF DEFENSE
ATTN: MS KATE ROSS

FROM   HQ AFCIC/IT
       1250 Air Force Pentagon
       Washington, DC 20330-1250

SUBJECT·   DoDIG Draft Report, 552 Air Control Wing Year 2000 Infrastructure Program for
           the Airborne Warning and Control System, (Project No 8AS-0032 11)

The Air Force concurs with the audit Findings and the 552nd Air Control Wing's

corrective actions. These Findings and corrective actions are described in the attached memo

SCOTT A. HAMMELL, Col, USAF
Deputy Director, CIO Support

Attachment·
552nd ACW Management Comments Memo

cc:
SAF FMPF
AFCIC/ITA

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 552d AIR CONTROL WING (ACC)
TINKER AIR FORCE BASE OKLAHOMA

30 Oct 98

MEMORANDUM FOR ACC/SC
204 DODD Blvd, Ste 303
Langley AFB VA 23665-2777

FROM: 552 ACW/CC
7481 Sentry Blvd, Ste 102
Tinker AFB OK 73145-9012

SUBJECT: Response to Draft DoD IG Report, Sep 98, Project No. 8AS-0032.11

1. This memo is in response to the Draft DoD IG report issued to the 552d Air Control Wing Sep 98. The 552 ACW generally concurs with the majority of the findings reported in the DoD IG report. However, during the times the IG team visited the 552 ACW, many of the required actions were already in progress and have since either been completed or are nearing completion

2. Reference recommendation 1. Concur with intent. We agree with the recommendation for more senior involvement. The 552 ACW has, as of Aug 98, incorporated a monthly Y2K status brief into wing staff meetings. The wing has also provided two staff members to assist the group and wing level POCs. On 13 Oct 98, the wing completed the expansion of the POC hierarchy structure that created, collected, and dispersed required documentation and information. This hierarchy of POCs will acquire signatures at both squadron and group levels on the documents (contingency plans, inventory lists, test certification results) produced by the respective organizations before forwarding them to the next level. This ensures senior level awareness, involvement, and accountability at each step of the preparation process.

3. Reference recommendation 2. Concur. We agree the program management plan (PMP) needed revision. This was already being done at the time the IG team returned in Jul 98. However, the team did not have the opportunity to review the changes made to the PMP. The 552 ACW has revised the wing's Program Management Plan and as of 28 Sep 98, included a supplemental preparation plan. This supplement gives further guidance and direction in the creation of contingency plans, test plans, and other documentation. Additionally, the revised program management plan and supplement address reporting requirements and certification. The wing will follow the schedule created in the revised plans and brief the status at monthly wing staff meetings.

4. Reference recommendation 3. Concur. We agree with the recommendation to reassess the wing infrastructure. The 552 ACW used the previously described POC hierarchy to distribute

Global Power for America

the current inventory to all sections within the wing. The POCs worked with each section to add and prioritize any previously overlooked items and simultaneously to assess all items on the inventory. Squadron and group commanders signed the inventory for their organization before forwarding the list to the next level. The 552 ACW completed the inventory reassessment 27 Oct 98.

5. The project officer for this audit report is 2Lt David McCoy, 552 ACW Y2K POC, DSN 884-7340, COMM (405) 734-7340.

MAURICE L. McFANN, JR.
Brig Gen, USAF
Commander

Audit Team Members

The Acquisition Management Directorate, Office of the Assistant Inspector General for Auditing, DoD, prepared this report.

Thomas F. Gimble
Robert K. West
Robert W. Otten
Jerel B. Silver
Kenneth M. Teore
Marvin E. Tuxhorn
Benedicto M. Dichoso
Laura A. Rainey
Kathryn J. Ross
Steven A. Baer

INTERNET DOCUMENT INFORMATION FORM

A . Report Title: **552ND Air Control Wing Year 2000 Infrastructure Program for the Airborne Warning and Control System**

B. DATE Report Downloaded From the Internet: **09/07/99**

C. Report's Point of Contact: (Name, Organization, Address, Office Symbol, & Ph #): **OAIG-AUD (ATTN: AFTS Audit Suggestions)**
Inspector General, Department of Defense
400 Army Navy Drive (Room 801)
Arlington, VA 22202-2884

D. Currently Applicable Classification Level: Unclassified

E. Distribution Statement A: Approved for Public Release

F. The foregoing information was compiled and provided by:
DTIC-OCA, Initials: __VM__ Preparation Date 09/07/99

The foregoing information should exactly correspond to the Title, Report Number, and the Date on the accompanying report document. If there are mismatches, or other questions, contact the above OCA Representative for resolution.